

December 1, 2011

To: Executive Board

Subject: **Solar Power Systems Project Update**

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### **Recommendation**

Receive and file the Solar Project Status Update.

### **Analysis**

In June 2011 the installation of solar power systems at Foothill Transit's Pomona and Arcadia Operations and Maintenance Facilities commenced.

The results of the solar power systems feasibility study identified that the optimal location for the installation of the photovoltaic (PV) panels is on the roof of the maintenance buildings. The solar power system consists of solar panels held in place by unirack rails attached to the roof based mounting supports. The roof based mounting support includes a structural steel post welded directly to the existing roof structure. Thus at Pomona a total of 165 - 7 inch diameter holes were required to open the roof deck and install the vertical post. While at Arcadia, 360 – approximately 12"x12" square holes had to be cut. A deputy welding inspector was present at all times to ensure any welded connections met building codes. The existing warranties for the roofs are still valid while an additional Installer Warranty has been provided for the work to seal the roof openings.

The construction sequencing for maintenance bay closure required close coordination between the general contractor and our operations contractors. Weekly construction progress meetings were conducted with the project team in order to discuss schedule and progress status.

Construction was completed and the solar power system was turned on at the Pomona Operations and Maintenance Facility on November 17, 2011. One of the requirements of the CSI program is to have a Performance Data Provider (PDP) which will monitor energy generation and usage. The Deck Monitoring software will allow Foothill Transit to monitor (real time) the amount of solar energy generated to date. Attached is a view of the monitoring dashboard at Pomona.

Construction at the Arcadia Operations and Maintenance Facility is scheduled to be complete mid-December 2011. The construction punch list- walk down at Arcadia is scheduled for December 6<sup>th</sup> between Foothill Transit, the Architectural & Engineering consultants and general contractor, Earl Corporation.

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As the solar project is in its final stage of completion, Foothill Transit is also in the process of submitting all necessary claim forms to Southern California Edison (SCE) for the California Solar Incentive (CSI) program. Foothill Transit has applied for the Performance Base Incentives (PBI) program which in turn allows Foothill Transit to receive incentives based on the actual solar energy produced from our solar generating system.

The below table is a summary of the projects at the two facilities:

	Construction Cost	No. of Solar Panels Installed	Estimated Annual Energy Produced (kWh/yr)	PBI Reservation Incentive Amount (paid over 5 yrs)
Pomona O&M Facility	\$ 963,921	378	125,371	\$ 94,028
Arcadia O&M Facility	\$ 1,587,368	742	264,342	\$ 198,256
<b>TOTAL</b>	<b>\$ 2,551,289</b>			<b>\$ 292,284</b>

**Budget Impact**

This project was funded through Foothill Transit's FY 2009 Federal Economic Recovery and Reinvestment Act of 2009 (ARRA) allocation.

Sincerely,



Sharlane Bailey  
Project Manager

  
Doran J. Barnes  
Executive Director